Nebraska Information Technology Commission

Government Technology Collaboration Fund - 2001

Grant Application Form

(Deadline for Submission: August 31, 2001)

For more information about Government Technology Collaboration Fund grants, see the Grant Guidelines at http://www.nitc.state.ne.us/sgc/grants/.

Contact information for questions regarding this form:
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Information Technology Support Tools Project

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Section I: General Information

A. Project Title: **Information Technology Support Tools Project**

Submitting Agency (or Agencies):

Department of Correctional Services (DCS)
Workforce Development – Department of Labor
Health and Human Services Systems (HHSS)
Information Management Services (IMServices)
Workers' Compensation Court (WCC)

Contact Information for this Project

Name: **Kevin Keller**
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B. Certification for Request
I certify that to the best of my knowledge the information in this application is correct and that the application has been authorized by this entity to meet the obligations set forth in this application.

Name: **Kevin Keller**

Title: **Information Technology Manager**

Agency: **Information Management Services**

Date: **August 30, 2001**

Total Grant Funds Requested:	$ 105,000
Total Project Costs:	$ 142,000

Section II: Executive Summary

Provide a one or two paragraph summary of the proposed project. This summary will be used in other externally distributed documents and should therefore clearly and succinctly describe the project and the information technology required.

The project to implement an IT Support Tools System is a joint project with the Department of Correctional Services, the Department of Labor's Workforce Development group, Health and Human Services Systems, Worker's Compensation Court, and DAS Information Management Services. These agencies are working together to replace and upgrade aging technical support software. The project also provides some of the agencies with new, needed software function. The system will include problem management (help desk), hardware/software management (technology assets tracking), change management, and knowledge bases. We anticipate that the selected product could become an enterprise-standard software because it offers current technologies, improved efficiency and effectiveness in overall technical support, and will benefit agencies with better communication, exchange of support data, and cost-effectiveness.

A number of agencies use some type of formal help-desk software. In addition, some agencies have adopted automated methods of tracking technology assets. The agencies recognize the need to link these two sources of information to each other and to the change management process and any available knowledge bases. The project aims towards this goal and would fulfill the immediate needs of several state agencies. In addition, we anticipate that in the future as agencies seek to replace their current software, a well-planned, solid enterprise-wide solution would be in place.

Section III: Goals and Objectives

1. Describe the project, including the specific goals and objectives.

The overall goal is to identify and implement software for information technology support to meet the needs of the state agencies, especially those which need improved software in the immediate future. The participating agencies met during the period of May – August 2001 to determine a common set of functional requirements and objectives derived from their experience and expertise with IT support.

The agencies are interested in replacing their current software for several reasons. Several agencies have internally developed software using older and more limited coding language. Since the databases will require major upgrades to provide the type of service expected from commonly available help-desk systems, an entire rewrite of the systems would not be out of the question. Other agencies use a diverse set of commercial packages which do not provide a full set of functions. The variety of software being used does not allow for sharing of data with others. None of it integrates with Internet technology. And finally, some agencies are seeking a product or module in order to formalize their growing IT support effort.

The project strategy is to find a common product that would meet the requirements of IT support in a state government environment while improving functionality, promoting interagency cooperation by permitting data exchange, and allowing the necessary customization to accommodate agency-specific factors. The participants have researched the variety of software that has grown out of the quickly developing customer-support industry. They have met and discussed the issues with others who use similar software in their business, such as Mutual of Omaha. These efforts provided a solid set of requirements to meet the support needs of state agencies. An RFP is being issued for a replacement product that would best meet these goals and objectives, specifically:

- Integration of support modules:
  A. Problem management
  B. Change management
  C. Asset management (hardware tracking, software licensing, and ID management)
  D. Knowledge base support

- Facilitation of cooperative efforts between state agency IT support staff:
  A. Escalation or transfer of requests/data throughout the system
  B. Announcement of major change events
  C. Sharing of knowledge base resources and diagnostic information
  D. Flexible administration to accommodate large agency independence or small agency cooperation

- Improvement or addition of functions:
  A. More efficient functions
  B. Improved management of processes
  C. Additional client-oriented functionality
  D. Increased system accessibility and security
  E. Better and more flexible report generation

F. Improved search capabilities
G. Automated notifications
H. More reliable data management
I. Improved system response time

- Conversion of any needed legacy data
- Implementation
- Training of expert staff within the agencies

2. Describe the project's relationship to the agency's comprehensive technology plan.

While each participating agency has its own technology plan, all of them share in the goal to more effectively and efficiently provide electronic government information and services. The project promotes that end through the efforts to improve support with the ability of agencies' IT staff to communicate effectively with their clients and each other concerning technology issues.

The central support role that IMServices provides is built on the belief in the benefits of collaboration. Its technology plan supports identifying common technology needs and cooperating with agencies to meet those needs. IMServices became aware of the opportunity to collaborate on an enterprise-wide solution for IT Support software and sees a great benefit in it. In a project such as this one, each agency as a single entity can benefit from taking advantage of the expertise and experience of the whole of state government.

3. Describe, if applicable, how this project furthers the implementation of electronic government. [Preference will be given to projects which support the State Government Council's priority of implementing electronic government as reflected in the goals of the Business Portal Action Plan and the E-Government Strategy (available at http://www.nitc.state.ne.us/sgc/).]

The project will use newer Internet-based technology and other advanced functions such as communications with PDAs, pagers, and cell phones. This will improve operations through better internal communications as well as communication with other agencies. Rather than having islands of diverse software, an enterprise approach would improve the exchange, availability, and distribution of necessary information. It would ease coordination of IT support efforts and promote best practices from the smallest agency to the largest.

The project will promote the second goal of the E-Government Strategy to improve services and increase efficiency and effectiveness of operations through collaboration. By reducing the purchase and support costs with a coordinated acquisition of a single product and funding part of the cost with grant monies, smaller agencies with limited budgets could afford to participate. Larger agencies could benefit from a monetary incentive to cooperate on this project at a time when they might direct limited agency funds to other IT projects.

Several requirements for the new IT support system would accomplish the E-Government Strategy's fourth goal as well as a Business Portal Action Plan objective to integrate electronic access to information and services and provide web accessibility. The project would provide accessibility through a browser interface, it would support knowledge bases for self-help around the clock, and would allow computer users to

contact their help desk while online if the knowledge base did not resolve their problem. It could provide a common, accessible point to locate information on major technology change events as well as scheduled or unexpected system and network downtimes.

With the replacement of various outdated IT support software products, the project would encourage improved agency operations which is another goal of the Business Portal Action Plan. It would assist the sharing of information as when requests are escalated to another agency's help desk or when a reorganization relocates people and equipment. It would streamline operations by replacing manual or cumbersome processes with automated techniques that are now standard features of many commercially-available products.

Section IV: Scope and Projected Outcomes

Describe the project's specific scope and projected outcomes. The narrative should address the following:

1. Beneficiaries of this project and the need(s) being addressed;

2. Expected outcomes of the project;

3. Measurement and assessment methods that will verify project outcomes;

The project addresses the need for the replacement of insufficient software with software that has integrated modules for more function and efficiency, utilizes better technologies, and ultimately provides better service. Integrated functions improve essential business processes in a number of ways, for example eliminating redundant data entry, linking software usage to ownership, planning and managing change, and using trend data to target improvement efforts.

An enterprise-wide solution addresses the increasing need for communication among the agencies' help desks and for coordination of actions between agency IT support staffs.

The immediate beneficiaries are the IT staff and computer users in collaborating agencies. In addition, all agencies that use IMServices to provide any type of help desk support and technical service benefit from the project.

Other agencies are encouraged to join the effort at any point to take advantage of the project's benefits. At this time, some agencies are satisfied with their current support tools and do not have money budgeted to change. It is anticipated that at some point in the future, they will need to upgrade their systems and would see the benefits of the enterprise-wide approach. This project will establish a set of best practices that could benefit those who may be forced to remain on older systems.

The project should have a large impact on computer users throughout the agencies. As more and more of our business processes rely on technology and communication, an enterprise solution for providing assistance is increasingly beneficial. The web-accessibility brings better 24 x 7 support for those who use state systems and networks during non-traditional business hours.

We anticipate that agencies will:

a. be able to streamline many manual, inefficient processes such as software license tracking or generating notices regarding failed processes;
b. be able to improve systems and services through better tracking of problem areas and processes;
c. have the capability to communicate and coordinate efforts more easily, especially when working with statewide networks, communications systems, and shared equipment; and
d. have a greatly improved set of tools for IT support of a growing client base;

Comparisons will be made on hardware/software costs and human resource time. A collective purchase of software should reduce those cost for each agency. One of the participating agencies reported spending over $1,000 monthly to maintain just their help-desk system. It would cost much more to update the system for maximum efficiency or add additional components.

A comparison can be made between research, acquisition, and testing time for products in a single, collaborative effort to multiple efforts among many agencies proceeding independently. Additionally, industry-wide, more than half of projects fail to achieve objectives. By promoting an enterprise-wide solution based on input from collective experience and knowledge, potential failures are reduced.

Over the long term, it is expected that agencies should report a more efficient set of processes resulting from automating or streamlining common basic functions, eliminating duplicate efforts, and utilizing an automated workflow. Improved reporting and trend analysis from the system data can provide new information on areas that are meeting agency expectations and those requiring increased effort or change.

Section V: Project Justification / Business Case

Please provide the project justification in terms of tangible benefits (an economic return on investment) and/or intangible benefits to the agency or the public. The narrative should address the following:

1. Tangible: Economic cost/benefit analysis;

There will be significant cost and time savings for all four areas addressed by the project.

For example, some agencies presently use a variety of tools to assist computer users, track ownership of hardware and software, and oversee system changes. The systems do not interact or allow the exchange of data which means re-keying information when it crosses function area or agency boundaries. The IMServices Help Desk estimates it exchanges calls with agencies at least 500 times a year which translates to redefining problems verbally to another team and duplicating efforts of documenting the problem and work to date.

Several systems need major redesign or replacement to benefit from expanded capacity or functionality, increased efficiency in features, and lack of current maintenance. The redesign and replacement costs figure conservatively in the tens of thousands of dollars for several agencies.

The IMServices Help Desk fields over 10,000 calls a year. According to estimates by the Help Desk Institute, calls to the help desk cost $75 an hour on the average. When a call can not be solved by the help desk staff because of limited time or skill, the call is escalated. When the help desk escalates a call to technical staff, the effort can cost up to $200 an hour on the average. If the help desk must escalate the call to an analyst or management level, the cost increases to an average of $200-$500 an hour. With these estimates, it literally would save money hourly if we could make the system more efficient in design and function for the staff and thus free up time to continue working a solvable problem at the first level.

The HHSS Help Desk estimates that it spends over $1,000 monthly to maintain the current problem management system and often the figure reached $3,000 a month. Those costs would pay for their new system within a few years while the better features of a new system would save further time and money.

IMServices has change management software but it is no longer under maintenance. Because the system is integral to the management process, there would be costs involved in replacing it if it failed or if it required an upgrade. Most of the other agencies have no software for change management so the benefits for them would be in efficiency rather than dollars.

There is a savings in monetary terms and work efficiency by integrating the problem management or help desk and the tracking of technology assets tools. The state's use of technology has expanded rapidly and left a large need in these two areas. Most of the participating agencies do not have software for managing technology assets that would automate many functions, eliminate redundant data entry, and allow staff to work with adequate and accurate information. It will help agencies remain in compliance with software agreements for licensing. This software will free up staff to work on other important tasks.

The value of expanding functionality and accessibility for the IT support tools software can be estimated and compared to the costs of not resolving problems efficiently or continuing to support and use separate, non-interacting systems for each of the areas of problem management, assets, and change control. Depending on the size of the effort, it could easily be tens of thousands of dollars that are saved for individual agencies. That savings would be multiplied with the other agencies. While some agencies can show that the cost of change is equivalent to the savings in maintenance alone, the expenditure involved could be prohibitive for others agencies and as a result they might continue as before. With the recent need for budget cuts, improvements such as this one could be delayed even longer.

2. Intangible: Benefits of the project for customers, clients, and citizens and/or benefits of the project for the agency;

Again, there will be intangible benefits for all four areas addressed by the project.

IMServices provides a change management system for application upgrades, hardware maintenance, and network availability. All agencies using the state network, mainframe resources, Internet, etc. benefit from change management via announcements generated manually through the IMServices Help Desk. The current system is not user-friendly nor is it accessible to a large number of IT staff or key clientele. It is limited because it does not interact with the current problem management or asset tracking systems. Additionally, many agencies have no change management processes or only informal ones. Integrating this function into the IT support tool package would provide a methodology and set of best practices as well as a means of communicating about change events for the larger community of state government. The benefit here will be realized over time by the availability of the tool to improve IT processes. That benefit will be seen as it becomes accepted as part of the IT business processes and is used to its fullest potential to improve operations.

Another intangible benefit is targeted for the many IT customers and clients with the availability of knowledge bases. Often the need to stop work, pick up a phone, and report a problem will prevent someone from seeking assistance with computer issues. While it's easier to ask a coworker or simply cope with the problem, it creates frustrations and inefficiencies that are passed along to others, including citizens. And because many problems are not reported, it is impossible to respond and fix the source of the problem. Some of the potential systems allow computer users to do self-help and if the problem is not resolved a request for assistance is generated automatically. If the problem is solved, statistics are kept so that support personnel can see a truer picture of the IT environment and the problems that arise.

Finally, there is an overall, intangible gain from implementing an enterprise-wide solution. The IT staff at Mutual of Omaha confirmed that their operations were streamlined and improved by joining diverse pockets of IT support through a shared system with standardized terminology and commonly-shared processes.

3. Other solutions that were evaluated and why they were rejected. Include their strengths and weaknesses. Explain the implications of doing nothing and why this option is not acceptable;

   A solution that has been put aside is the redesign of the current Lotus Notes application used by HHSS and IMServices. The application was designed and built using Notes technology that is several releases old. It has been maintained by internal staff, bit by bit, but with no significant work. At this point in time, it would take a major effort to redesign and rewrite the system to contain all the functionality that is offered "out of the box" by commercially-available products. Likewise it would not be cost effective to reinvent a solution that is the standard fare offered by many others in the customer-support software industry.

   Another solution is to do nothing. Among the current agency software is TrackIt, the Lotus Notes applications, and an AS/400 solution. Meeting the growing needs of technology support will be hindered and delayed by the lack of functionality in the current software if we choose this solution.

4. If the project is required to comply with a state or federal mandate, please so indicate.

   N/A

Section VI: Implementation

Describe the implementation plan -- from design through installation and ongoing support -- for the project. The narrative should address the following:

1. Project sponsor(s) and stakeholder acceptance analysis;

2. Define the roles, responsibilities, and required experience of the project team;

   Each collaborating agency will have a representative to assist in evaluating solutions that meet the mutual needs and goals that have been compiled by the group. We feel confident in our requirements and expect that everyone's needs will be met and that other agencies will eventually participate and find benefits.

   The project team includes representatives of the different functional areas of IT support including IT support managers, help desk staff, hardware/software support, change management administrators, application development staff, Lotus Notes staff, and asset control staff. These members have brought their experience and expertise to the table to compile the requirements and direction of the effort. We have included NIS representatives and input from outside of state government to provide complete information at our meetings.

   Each participating agency also supports the effort with a designated individual who will represent the agency's interests through coordination of the evaluation process and participation in the final decisions. These representatives will determine the procedures and priorities in implementing the final decision.

3. List the major milestones and deliverables for each milestone;

   RFP Process – Immediate
   Agency Funding Decision – Oct/Nov 2001
   Product Decision – November 2001
   Vendor Testing and Implementation – December 2001-January 2002
   Full Implementations by State Staff – January-December 2002

4. Training and staff development requirements and procedures;

   The project's objective is to provide an opportunity for technical staff from each participating agency to participate in the initial vendor testing and implementation work. They will participate in the Client Acceptance testing also. This will serve as a training opportunity for technical and administrative staff.

   When the product design has been accepted, each agency will be able to implement the IT support system as is necessary for their business process. The participants from agencies will agree to a set of required common procedures and determine priorities and best practices for the continued support of the system.

   The vendor may provide initial administrative and user training in a "train the trainer manner" and then the participating agencies will continue that training throughout their respective IT support areas.

5. Ongoing support requirements, plans and provisions.

The IT Support Tools RFP requests pricing for one and three years of support and maintenance. We anticipate the formation of an IT Support Tools System Steering Committee that oversees the ongoing support decisions of the system and promotion of its use throughout state government. Our initial project group would be available as a resource to other agencies migrating to the new system.

Section VII: Technical Impact

Describe how the project enhances, changes or replaces present technology systems, or if new systems are being added. The narrative should address the following:

1. Descriptions of hardware, software, and communications requirements for this project. Describe the strength and weaknesses of the proposed solution;

2. Issues pertaining to reliability, security and scalability;

3. Conformity with applicable NITC technical standards and guidelines (available at http://www.nitc.state.ne.us/standards/) and generally accepted industry standards;

4. Compatibility with existing institutional and/or statewide infrastructure.

The Request for Proposal requirements indicate our goal of implementing a solution with the existing client hardware and the standards and communications environment that is in place. With the option for browser and client interfaces to the system, it provides further flexibility in implementation. We anticipate the addition of server hardware to support the new software. IMServices will host a server that will be used by themselves as well as several other agencies. In addition, several agencies anticipate hosting and administering their own server and database. They include Department of Labor 's Workforce Development and Health and Human Services.

The strength of this solution is that it becomes more affordable to agencies wanting to improve the IT support process. Agencies should be able to begin participation with much less expense and work effort relational to their size.

Security, reliability, and scalability issues are being addressed in the Request for Proposal and are important decision points. Due to the nature of IT support, reliability and security are high priorities. Providing information to clients via a web interface makes security a key part of the solution. To meet the needs of a broad range of state agencies, scalability is also a key factor that must be considered.

The proposal is consistent throughout with the technical standards and guidelines put forth by the NITC and we will require that vendors' proposed software meet the generally accepted industry standards where applicable. In general, most features of the proposed system will contribute to a higher degree of conformity.

The IT Support Tools System Request for Proposal specifies the conditions that are expected such as required functions, which are an integral part of today's business processes, and anticipated infrastructure conditions such as compatibility with adaptive technology and the new NIS system.

Section VIII: Risk Assessment

Describe possible barriers and risks related to the project. The narrative should address the following:

1. List the identified risks, and relative importance of each;

2. Identify strategies which have been developed to minimize risks.

The project aims to identify a software package with four integrated, fully-functional modules. These modules vary in importance and priority to the participating agencies. We anticipate that vendors' proposals will meet the requirements of the various modules in varying degrees. In selecting a "best of breed" product with considerations for cost, decisions may have to be made as to the value of each module to the project as a whole as well as to individual agencies. Individual agencies' needs could be satisfied, or conversely, fall short of expectations, thus jeopardizing participation in a solution with software that does not offer a full complement of functions.

An additional risk comes with the quickly changing nature of the IT environment, specifically in the area of the NIS project. The targeted system would ideally interface with NIS or some of our requirements would become obsolete as NIS becomes better defined. NIS theoretically could introduce new requirements. It may be difficult for vendors and evaluators to target a solution where the needs continue to change in nature and value. Wording in the RFP explains the changing nature of the asset management requirements. Vendors will be able to propose their best plan for a solution given the conditions.

Finally, there is a risk from the budget cuts requested in order to adjust to a decrease in expected revenue. The ability of agencies to participate is jeopardized and other, more important or less expensive projects are assigned the limited agency funds.

The participating agencies are discussing the above concerns. They are determining where sacrifices can be made and still meet the expectations of the project and the participants' business processes. This will be completed before the evaluation of proposals from the Request for Proposal. The goal is to have a process, expectations, and commitments in place to smooth the decision-making process.

Section IX: Financial Analysis and Budget

1. Provide the following financial information:

	GTCF Grant Funding	Cash Match	In-Kind Match	Other Funding Sources	**Total**
Personnel Costs			5,000		5,000
Capital Expenditures (Hardware, software, etc.) - Servers - Software, licensing - Maintenance	 100,000 5,000	 30,000			 135,000
Contractual Services					
Supplies and Materials					
Telecommunications					
Training			2,000		2,000
Travel					
Other costs					
Total	$105,000	$30,000 ❶	$7,000 ❷		$142,000 ❸

2. Provide a detailed description of the budget items appearing above.

Personnel Costs category includes:

In-kind services would cover the salaries of a limited number of agency staff as they learn the system, customize the interface, and test the software for acceptance.

Capital Expenditures category includes:

Capital expenditures includes server software and enterprise licensing that would be fully or partially purchased with grant money depending on the cost. Potentially client licensing would be purchased by the agencies in the quantities required by their size. We do not have estimated pricing on software yet so this figure represents a best estimate from list pricing on what we see commercially available.

Maintenance would cover the initial support specified in the RFP. The RFP is requesting a quote on one and three years of ongoing maintenance but we anticipate a one-year agreement.

Training represents the costs of agency personnel to assemble training for the remainder of the IT support staff who will also be using the system and then training their staff.

3. Match Requirement: This grant requires a 25% match from the agency. Please use the calculation below to ensure your application meets this requirement.

   Because of the potential cost of implementing the system across all participating agencies, we anticipate that the match requirement will be exceeded.

   $30,000 + $7,000 / $142,000 = .26